Claims

What is claimed is:

- [c1] A method for delivering keystrokes to descendants of an inactive window, comprising: remembering a descendant of the inactive window as a next focus owner when the descendant receives a focus-in event;
 - creating a focus proxy for the inactive window and issuing a request to set focus to the focus proxy;
 - marking the next focus owner as the true focus owner when the focus proxy receives a focus-in event; and
 - directing the focus-in event received by the focus proxy to the true focus owner.
- [c2] The method of claim 1, wherein the focus-in event received by the descendant is a native focus event generated in response to a request to set focus to the descendant.
- [c3] The method of claim 2, wherein remembering the descendant of the inactive window as the next focus owner comprises discarding the focus-in event received by the descendant.
- [c4] The method of claim 2, further comprising discarding a native activation event received by the inactive window, wherein the native activation event is generated in response to the request to set focus to the descendant.
- [c5] The method of claim 1, wherein creating a focus proxy for the inactive window comprises creating an invisible child of a nearest owning window of the inactive window that can be active.
- [c6] The method of claim 5, further comprising activating the nearest owning window of the inactive window that can be active.
- [c7] The method of claim 1, wherein the focus-in event received by the focus proxy is a native focus event generated in response to issuing the request to set focus to the focus proxy.

- [c8] The method of claim 1, further comprising discarding a native focus-out event received by the descendant, wherein the native focus-out event is generated in response to the request to set focus to the focus proxy.
- [c9] The method of claim 1, wherein the descendant of the inactive window receives the focus-in event in response to a user clicking on the descendant.
- [c10] The method of claim 1, wherein the descendant of the inactive window receives the focus-in event in response to the descendant issuing a focus request through function invocation.
- [c11] The method of claim 1, wherein the focus proxy receives a key event when a keystroke is delivered to the descendant.
- [c12] The method of claim 11, further comprising directing the key event to the true focus owner.
- [c13] The method of claim 1, further comprising determining a component gaining focus when the focus proxy receives a focus-out event.
- [c14] The method of claim 13, further comprising determining whether the component is governed by the focus proxy.
- [c15] The method of claim 14, further comprising determining whether the component is the true owner if the component is governed by the focus proxy.
- [c16] The method of claim 15, further comprising discarding the focus-out event if the component is not the true owner.
- [c17] The method of claim 16, further comprising issuing a request to set focus to the focus proxy.
- [c18] The method of claim 15, further comprising directing the focus-out event to the true focus owner and setting the true focus owner to null if the component is not governed by the focus proxy.

- [c19] The method of claim 18, further comprising remembering the component as the next focus owner when the component receives a focus-in event.
- [c20] The method of claim 19, further comprising issuing a focus request to the focus proxy.
- [c21] The method of claim 20, further comprising marking the next focus owner as the true focus owner when the focus proxy receives a focus-in event.
- [c22] The method of claim 21, further comprising directing the focus-in event delivered to the focus proxy to the true focus owner.
- [c23] A method for delivering keystrokes to descendants of an inactive window, comprising: remembering a descendant of the inactive window as the next focus owner when the descendant receives a focus-in event;
 - creating a focus proxy for the inactive window and issuing a request to set focus to the focus proxy;
 - marking the next focus owner as the true focus owner when the focus proxy receives a focus-in event;
 - directing the focus-in event received by the focus proxy to the true focus owner; and directing a key event received by the focus proxy to the true focus owner.
- [c24] The method of claim 23, wherein the key event is generated in response to a user delivering keystrokes to the descendant.
- [c25] A method for delivering keystrokes to descendants of an inactive window, comprising: creating a focus proxy for the inactive window and directing a key event received by the focus proxy to a descendant of the inactive window.
- [c26] The method of claim 25, wherein the focus proxy is created when the descendant receives a focus-in event.
- [c27] The method of claim 26, wherein the descendant receives a focus-in event in response to a user clicking on the descendant.

- [c28] The method of claim 26, wherein the descendant receives a focus-in event in response to the descendant issuing a focus request through function invocation.
- [c29] The method of claim 25, wherein the focus proxy receives the key event when a keystroke is delivered to the descendant.
- [c30] The method of claim 29, wherein creating the focus proxy comprises determining the nearest owning window of the inactive window that can be active and creating an invisible child of the nearest owning window of the inactive window that can be active as the focus proxy.
- [c31] A computer-readable medium having stored thereon a program which is executable by a processor, the program comprising instructions for:

 creating a focus proxy for an inactive window and directing a key event received by the focus proxy to a selected descendant of the inactive window.
- [c32] The computer-readable medium of claim 31, wherein the program creates the focus proxy in response to the descendant receiving a focus-in event.
- [c33] The computer-readable medium of claim 32, wherein the descendant receives the focusin event in response to a user clicking on the descendant.
- [c34] The computer-readable medium of claim 32, wherein the descendant receives the focusin event in response to the descendant issuing a focus request through function invocation.
- [c35] The computer-readable medium of claim 31, wherein the program further comprises instructions for remembering the descendant as the next focus owner when the descendant receives the focus-in event.
- [c36] The computer-readable medium of claim 35, wherein the program further comprises instructions for marking the next focus owner as the true focus owner when the focus proxy receives a focus-in event.

- [c37] The computer-readable medium of claim 36, wherein the program further comprises instructions for directing the focus-in event received by the focus proxy to the true focus owner.
- [c38] The computer-readable medium of claim 31, wherein instructions for creating a focus proxy for the inactive window comprise instructions for determining the nearest owning window of the inactive window that can be active and creating an invisible child of the nearest owning window that can be active as the focus proxy.